



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/866,865	05/29/2001	Thomas F. Doyle	2293.2008-000	4500
21005	7590	06/03/2005	EXAMINER	
HAMILTON, BROOK, SMITH & REYNOLDS, P.C.			LEE, BENJAMIN C	
530 VIRGINIA ROAD			ART UNIT	
P.O. BOX 9133			PAPER NUMBER	
CONCORD, MA 01742-9133			2632	

DATE MAILED: 06/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/866,865

Applicant(s)

DOYLE, THOMAS F.

Examiner

Benjamin C. Lee

Art Unit

2632

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 03 January 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-37 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**Response To Amendment**

***Claim Status***

1. Claims 1-37 are pending.

***Claim Rejections - 35 USC § 103***

2. Claims 1-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murakami et al. (US pat. #6,253,980).

1) In considering claims 1 & 5:

a) Murakami et al. discloses a system for determining the availability of mobile assets ("shared", i.e. rentable, vehicles 16) comprising: a plurality of mobile asset sources (14) for providing mobile assets that may be made available and are of one or more types (col. 16, lines 12-14 and col. 6, lines 16-18), each mobile asset comprises a location detector (206 of col. 13, lines 62-66 and col. 22, lines 1-10) for providing position data, at least one mobile asset sensor (col. 13, line 32-40; col. 7, line 66 to col. 8, line 43; col. 14, lines 4-52 and col. 7, lines 15-16) for detecting a parameter relating to the availability of the mobile asset and wireless communication mechanism (190) for transmitting relating to the availability of the mobile asset; and a data center (12) for providing the availability status of the mobile assets (col. 7, lines 15-16), wherein, the parameter related to availability includes at least a mobile asset loaded/unloaded status (col. 14, lines 20-29 whereby weight sensors information, and/or door opening/closing sensor information after parking/ignition-off detection indicative of whether person leaves vehicle constitute loaded/unloaded status), and the data center comprises a receiver (182) for receiving the availability data from the mobile assets (col. 7, line 66 to col. 8, line 7) and a processor (180

Art Unit: 2632

of col. 19, line 67 to col. 20, line 5 and col. 17, lines 2-5) programmed for processing various functions including availability data and using the data to determine the availability of each mobile asset (col. 17, lines 49-59);

Except:

b) specifying the claimed said data center processor is programmed for determining the type of each mobile asset wherein the availability data is determined based on the type of each mobile asset.

However, since the Murakami et al. system is a shared/rental vehicle system having a programmed data center processor for determining availability of vehicles of different types comprising correspondingly different characteristics for user/customer request/selection/reservation, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention that such processor is, should or meant to be programmed for determining the type of each vehicle so that availability data and availability of a particular customer's requested vehicle type can be determined.

2) In considering claim 2, Murakami et al. made obvious all of the claimed subject matter as in claim 1, wherein:

Since Murakami et al. teaches that system control computer 254 (one version of data center/central facility 12 which receives asset status and availability information to determine availability according to col. 17, line 34-37) of Fig. 14, col. 17, lines 42-58 and step 286 of Fig. 15 acts as a web-server to allow mobile asset sources (14) as well as remote Internet connected computer users to access the vehicle sharing system to determine vehicle availability and to make vehicle reservations by checking shared system database for vehicle location and status,

Art Unit: 2632

and that asset status and availability information are received by the data center processor to determine each mobile asset availability as set forth previously, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention for such a web server to keep those asset status and availability information of each mobile asset in the form of a server database record developed by said processor as is conventional in server database design of this type to enable use in determining the availability, especially since such asset status and availability information are also kept/used as record for user history according to col. 17, line 61 to col. 18, line 12) and system control computer 254 also includes a “monitoring control process 264” according to Fig. 14 so that a record of monitored parameters including asset status and availability information is relevant and desirable.

3) In considering claims 3-4, Murakami et al. made obvious all of the claimed subject matter as in claim 1, including:

--the claimed wherein the at least one mobile asset sensor detects a parameter relating to the status of the mobile asset, including mobile asset motion, door activity, security data, location, mileage, fuel level and tire status (col. 13, line 32-40; col. 7, line 66 to col. 8, line 14; col. 14, lines 4-32; col. 15, lines 50-51 and col. 13, lines 20 & 55-58.)

4) In considering claims 6-7, Murakami et al. made obvious all of the claimed subject matter as in claim 1, except:

--specifying the claimed said mobile asset sources including trucking rental companies or trucking companies that make available mobile assets on a rental basis.

Since trucking rental companies as well as trucking companies that make available mobile assets on a rental basis constitute two examples of vehicle rental sources, it would have

Art Unit: 2632

been obvious to one of ordinary skill in the art at the time of the claimed invention that the rental sources in a system such as taught by Murakami et al. is applicable to and encompasses such two examples of rental sources.

5) In considering claim 8, Murakami et al. made obvious all of the claimed subject matter as in claim 1, including:

--the claimed wireless communication mechanism provides two-way text messaging between a user (system administrator at central facility of col. 20, lines 20-26) and a mobile asset driver (col. 13, lines 44-61.)

6) In considering claim 9, Murakami et al. made obvious all of the claimed subject matter as in claim 1, including:

--the claimed said data center has a server system (Fig. 14) having a network connection to a user computer for providing information relating to the availability of the mobile assets (col. 17, lines 42-58.)

7) In considering claim 10, Murakami et al. made obvious all of the claimed subject matter as in claim 1, including:

--the claimed at least one asset monitoring sensor connected to the data center for providing data relating to the availability of the mobile asset (col. 21, lines 42-48; col. 19, lines 50-64 and col. 7, line 66 to col. 8, line 8.)

8) In considering claim 11, Murakami et al. made obvious all of the claimed subject matter as in claim 10, wherein:

Since the port facilities 14 is also a parking facility having parking spaces wherein the at least one asset monitoring sensor is located to detect mobile assets (col. 21, lines 44-48), it would

Art Unit: 2632

have been obvious to one of ordinary skill in the art at the time of the claimed invention that such port facilities having parking spaces in a system such as taught by Murakami et al. can be implemented in the form and arrangement of a well known vehicle parking garage.

9) In considering claim 12, Murakami et al. made obvious all of the claimed subject matter as in claim 1, including:

--the claimed manual input communication link connected (inclusive of wired or wireless) to the data center for receiving manual input of data relating to the availability of the mobile assets (col. 21, lines 50-51.)

10) In considering claim 13, Murakami et al. made obvious all of the claimed subject matter as in claim 12, plus the consideration of claim 5, wherein:

Since the system of Murakami et al. as established in claims 1 and 5 determines availability based on factors including mobile asset type data, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention that either the mobile asset communication system automatically inserts such type data with the manually input availability data for communication to the data center, or such type data needs to be provided by the manual input data, whereby the latter can be chosen to reduce the system complexity and cost associated with the automatic insertion feature.

Furthermore, the claimed "system for exchanging mobile assets" as recited in the preamble of the claim as an intended use is met by col. 15, lines 57-60 whereby relocation of vehicles of different types from one port facility to another and vice versa constitutes the exchange.

Art Unit: 2632

11) In considering claim 14, Murakami et al. made obvious all of the claimed subject matter as in the consideration of claims 2 (incorporating claim 1) and 9 above (please refer to citation references and explanation in the rejection of those claims.)

12) In considering claim 15, Murakami et al. made obvious all of the claimed subject matter as in claim 14, plus the consideration of claim 6.

13) In considering claim 16, Murakami et al. made obvious all of the claimed subject matter as in claim 14, plus the consideration of claim 7.

14) In considering claims 17-18, Murakami et al. made obvious all of the claimed subject matter as in claim 14, plus the consideration of claim 9.

15) In considering claim 19, Murakami et al. made obvious all of the claimed subject matter as in claim 14, plus the consideration of claim 2.

16) In considering claims 20-21, Murakami et al. made obvious all of the claimed subject matter as in claim 14, wherein:

the vehicles included and identified in the rental system constitutes authorized mobile assets in that they are authorized for rental, including owned, lease or rented by “a user”, i.e. an owner or shareholder of the rental facility or the provider of the vehicles, and that the status of the authorized mobile assets is interpreted as the availability status.

17) In considering claim 22, Murakami et al. made obvious all of the claimed subject matter as in claim 14, wherein:

Availability/reservation requests from the user computers are directed to a subset of the mobile assets from the asset sources.



18) In considering claim 23, Murakami et al. made obvious all of the claimed subject matter as in claim 14, except:

--the claimed one of the user computers is used by one of the plurality of mobile asset sources to make a mobile asset available.

However, since the mobile asset sharing system of Murakami et al. is implemented in the form of an Internet accessible system using server and database that allows a plurality of remote users' computer to access it, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention that mobile asset sources who wish to make mobile assets available constitutes remote users and therefore can use one of the user computers to access such Internet-based system to perform various operations including making mobile asset sources available.

19) In considering claims 24-25 and 32, Murakami et al. made obvious all of the claimed subject matter as in the consideration of claims 1 and 14, and wherein:

Since it has been known in business that sometimes it is more cost-efficient for one or more of the business operations to be managed by an intermediary business entity who/which is knowledgeable, experienced or extremely efficient in operations such as Internet/network communication, agreements/contracts, customer and financial transactions including billing, credit/payment charging, bank account balance and profits, and services, etc., it would have been obvious to one of ordinary skill in the art at the time of the claimed invention that such an intermediary business entity such as that comprising an Internet server and database can be used for linking the data center 12 or system computer 254 (Fig. 14), the computer users, and the

Art Unit: 2632

mobile asset sources through the Internet in a business system such as taught by Murakami et al. to provide the intended services while achieving cost efficiency.

20) In considering claim 26, Murakami et al. made obvious all of the claimed subject matter as in claim 24, plus the consideration of claim 23.

21) In considering claims 27-28, Murakami et al. made obvious all of the claimed subject matter as in claim 24, plus the consideration of claims 6-7, respectively.

22) In considering claim 29, Murakami et al. made obvious all of the claimed subject matter as in claim 24, including:

--the claimed data center computer (180, or 254 of Fig. 14) for determining availability of each mobile asset.

23) In considering claim 30, Murakami et al. made obvious all of the claimed subject matter as in claim 24, wherein:

Whatever operations not performed by the intermediate business entity are left to the users and the mobile asset sources to efficiently manage the available mobile assets by conducting transactions including rental transactions and exchanges.

24) In considering claim 31, Murakami et al. made obvious all of the claimed subject matter as in claim 24, except:

--specifying the claimed said intermediate business entity automates recurring rental transactions and exchanges between a common long-term user and a mobile asset source.

However, Murakami et al. discloses keeping a historical record of user information including user ID and past rental information in a database that is interfaced with the registration server (col. 17, line 60 to col. 18, line 19). It would have been obvious to one of ordinary skill in

Art Unit: 2632

the art at the time of the claimed invention for the intermediate business entity in a system such as taught by Murakami et al. to automate recurring rental transactions and exchanges between a common long-term user and a mobile asset source using such historical record, for example the user's ID information can be pulled from the record for a transaction to facilitate the "registration" process and thereby need not be requested for input by the user, thus automating the transaction that provides convenience to the user and making the system more appealing to the customer and encouraging future business from said customer.

25) In considering claim 33, Murakami et al. made obvious all of the claimed subject matter as in claim 24, including:

--the claimed intermediary business entity further comprises a memory for storing a record of transactions (col. 17, line 60 to col. 18, line 19).

26) In considering claim 34, Murakami et al. made obvious all of the claimed subject matter as in claim 33, including:

--the claimed said intermediary business entity determines a rental charge of a mobile asset based on the record of transactions and the agreement (consideration of claim 24 above.)

27) In considering claim 35, Murakami et al. made obvious all of the claimed subject matter as in claim 33, including:

--the claimed said intermediary business entity determines the transaction balance of mobile asset source based on the record of transactions (consideration of claim 24 above.)

28) In considering claim 36, Murakami et al. made obvious all of the claimed subject matter as in claim 33, including:

--the claimed said intermediary business entity determines the transaction balance of a user based on the record of transactions (consideration of claim 24 above.)

29) In considering claim 37, Murakami et al. made obvious all of the claimed subject matter as in claim 1, except:

--the claimed wherein each of the mobile assets includes a tractor-trailor.

Murakami et al.'s rental system is directed to vehicles in general and can include cars having a carrier for a motorcycle (Figs. 5 and 12). It would have been obvious to one of ordinary skill in the art at the time of the claimed invention that a rental system such as taught by Murakami et al. can be applied to various vehicles including tractor-trailers, and to include rental of tractor-trailers if a business case can be made for profitability in renting tractor-trailer mobile assets.

### ***Response to Arguments***

3. Applicant's arguments filed 1/3/05 have been fully considered but they are not persuasive.

1) The amended claimed mobile asset loaded/unloaded status in the availability parameter is met by Murakami et al. as more specifically indicated above.

2) The claimed data center is met by data center 12 of Murakami et al. as indicated in the rejection.

3) Regarding applicant's request for proof that use of intermediate business entity for managing certain aspect of the overall operation is known at the time of the claimed invention, examiner is hereby citing DeLorme et al. (US 5,948,040: col. 3, line 52 to col. 4, line 3; col. 14, lines 27-42) as an example.

4) In conclusion, applicant's arguments are not deemed persuasive, and the rejection is maintained.

***Conclusion***

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Benjamin C. Lee whose telephone number is (571) 272-2963. The examiner can normally be reached on Mon -Fri 11:00Am-7:30Pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel Wu can be reached on (571) 272-2964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2632

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Benjamin C. Lee  
Primary Examiner  
Art Unit 2632

B.L.